

What is claimed is:

1. A header assembly for connecting an implantable medical device to a conductor terminating at a body organ intended to be assisted by the medical device, the header assembly comprising:

(a) a housing for the medical device, the housing comprising control circuitry, at least one electrical energy storage device, and at least one feedthrough wire extending from the control circuitry and through a wall of the housing;

(b) a terminal positioned outside the housing and connected to a distal end of the feedthrough wire, wherein the terminal is directly connectable to a lead for the conductor;

(c) a seal electrically insulating the feedthrough wire from the wall of the housing; and

(d) a body secured to the wall of the housing and supporting the terminal for connecting to the lead.

2. A header assembly for connecting an implantable medical device to a conductor terminating at a body organ intended to be assisted by the medical device, the header assembly comprising:

(a) a housing for the medical device, the housing comprising control circuitry, at least one electrical energy storage device and at least a first and a second

feedthrough wires extending from the control circuitry and through a wall of the housing;

(b) a first terminal positioned outside the housing and connected to a first distal end of the first feedthrough wire, wherein the first terminal includes a first lead opening;

(c) a second terminal positioned outside the housing and connected to a second distal end of the second feedthrough wire, wherein the second terminal includes a second lead opening, and wherein the first and second lead openings of the first and second terminals are aligned in a first co-axial relationship;

(d) a seal electrically insulating the first and second feedthrough wires from the wall of the housing; and

(e) a body secured to the wall of the housing and supporting the first and second terminals with a first bore communicating from outside the body to the first and second lead openings in the first co-axial relationship.

3. The header assembly of claim 2 wherein the housing has third and fourth feedthrough wires extending from the control circuitry and through the wall of the housing to respective third and fourth terminals having third and fourth lead openings aligned in a second co-

axial relationship along a second bore communicating from outside the body to the third and fourth terminals.

4. The header assembly of claim 3 wherein the first co-axial relationship of the first and second lead openings along the first bore is offset with respect to the second co-axial relationship of the third and fourth lead openings aligned along the second bore.
5. The header assembly of claim 2 wherein the body is of a polymeric material.
- 10 6. The header assembly of claim 2 wherein the body is secured to the wall of the housing by encasing anchors extending therefrom.
7. The header assembly of claim 2 wherein the wall of the housing is a lid.
- 15 8. The header assembly of claim 2 wherein the housing for the medical device comprises mating first and second clam shells closed by a lid.
9. The header assembly of claim 2 wherein the first and second terminals include first and second apertures.
- 20 10. The header assembly of claim 9 wherein a threaded member is receivable in the first and second apertures of the respective first and second terminals.
11. The header assembly of claim 9 wherein the body includes first and second passageways in communication

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16. The header of claim 2 wherein the first and second terminals are selected from the group consisting of a terminal block, a sleeve, a ring-shaped member supporting a coil spring and a ring shaped member supporting at least one leaf spring.

17. A method for connecting an implantable medical device to a conductor terminating at a body organ

(a) providing the medical device having a housing containing control circuitry, at least one electrical energy storage device and at least one feedthrough wire extending from the control circuitry through a wall of the housing to a distal end located outside the housing;

(b) connecting the distal end of the feedthrough wire to a terminal connectable to a lead of the conductor; and

(c) molding a body of polymeric material secured to the wall of the housing with the body supporting the terminal.

18. A method for connecting an implantable medical
15 device to a conductor terminating at a body organ
intended to be assisted by the medical device,
comprising the steps of:

(a) providing the medical device having a housing containing control circuitry, at least one electrical energy storage device and at least a first and a second feedthrough wires extending from the control circuitry through a wall of the housing to first and second distal ends located outside the housing;

(b) connecting the first and second distal ends of
25 the first and second feedthrough wires to respective

(c) molding a body of polymeric material secured
5 to the wall of the housing with the body having a bore
communicating from outside the body to the first co-
axial first and second lead openings of the terminals.

19. The method of claim 18 including providing the housing having third and fourth feedthrough wires
10 extending from the control circuitry and through the wall of the housing to respective third and fourth terminals having third and fourth lead openings aligned in a second co-axial relationship along a second bore communicating from outside the body to the third and
15 fourth terminals.

20. The method of claim 18 including providing the wall of the housing having anchors encased by the polymeric material to secure the body to the housing.

21. The method of claim 18 wherein the wall of the
20 housing is a lid.

22. The method of claim 18 including providing the housing for the medical device comprising mating first and second clam shell housing portions closed by a lid.

23. The method of claim 18 including providing the first and second terminals having first and second apertures.

24. The method of claim 23 including inserting a lead
5 of the conductor into the bore of the body and into the first and second lead openings of the first and second terminals aligned in the first co-axial relationship and then threading a threaded member into the first and second apertures of the respective first and second
10 terminals to retain the lead in place.

25. The method of claim 23 including providing the body having first and second passageways in communication with first and second apertures in the respective first and second terminals.

26. The method of claim 18 including providing the bore
15 having an annular channel supporting an O-ring for sealing about a lead of the conductor received in the first and second terminals.

27. The method of claim 18 including selecting the
20 electrical energy storage device from a battery and a capacitor.

28. The method of claim 18 including selecting the
25 medical device from the group consisting of a hearing assist device, neurostimulator, cardiac pacemaker, drug pump and cardiac defibrillator.

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29. The method of claim 18 including selecting the first and second terminals from the group consisting of a terminal block, a sleeve, a ring-shaped member supporting a coil spring and a ring shaped member supporting at least one leaf spring.
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